Please amend paragraph [0032] on page 9 as follows:

[0032] Third, a primer design software, like web-based Primer 3 (available from the genome webpage with extension ~~http://www.genome.~~wi.mit.edu/cgi-bin/primer/primer3_www.cgi), is used to design a complement for the selected or predetermined gDNA sequence. The primers in reaction, in contrast to STS probes that are spotted on a surface, are designed with greater specificity for gDNA amplification according to more stringent parameters in terms of sequence length and about 50-60% G+C content. Individual primers are verified by BLAST search for correct gene origin and absence of random overlapping sequences. Generally, the primer designed for a given segment should not contain a related sequence. Table 2 lists all primer sequences used. Two types of primer pair were designed at about 500 bp apart (or within 200-400 bp when the 3'UTR is less than 500 bp long) and away from repetitive sequences. Type I contains a T7 promoter at the 5'end of the gene specific primer (GSP) in the sense direction and a T3 promoter at the 5'end of the GSP in the anti-sense direction. In particular, the sequence for T7 promoter is 5'-TAATACGACTCACTATAGGG-3' Seq. No. 196 and for T3 promoter is 5'-ATTAACCCTCACTAAAGGGA-3' Seq. No. 197 (derived from Invitrogen™). Type II primers only contain gene specific sequences. All primers were purchased from Sigma-Genosys™ as desalted and dried pellets. Each pellet was dissolved in ddH_2O to a final concentration of 500 μM.

In the Claims

Please rewrite claims 1, as follows:

1. (Currently amended) A method for amplifying expressed genetic sequences from gDNA selected from a ~~mammalian or higher~~ higher-order ~~plant~~ eukaryotic species, for printing on DNA microarrays, the method comprises:

identifying either 1) a 3'UTR of a gDNA sequence based on the presence of a stop codon and a polyadenylation signal in the gDNA sequence corresponding to an expressed mRNA sequence, or 2) an exon of a gene defined by computer software;

selecting a predetermined gDNA sequence within the 3'UTR or exon;

designing a probe for said predetermined gDNA sequence;

performing a first polymerase chain reaction (PCR) for the 3'UTR or exon on gDNA to generate PCR-product;